

CLAIMS

Claim 1 (canceled).

2. (currently amended) The ultra-wideband communication ~~system of claim 9~~ device of claim 30, wherein the ultra-wideband signal comprises an impulse radio signal.

3. (currently amended) The ultra-wideband communication ~~system of claim 9~~ device of claim 30, wherein the ultra-wideband signal comprises a pulse of electromagnetic energy having a duration that can range between about 0.1 nanoseconds to about 100 nanoseconds.

4. (currently amended) The ultra-wideband communication ~~system of claim 9~~ device of claim 30, wherein the ultra-wideband signal comprises a pulse of electromagnetic energy having a duration that can range between about 0.1 nanoseconds to about 100 nanoseconds and a power that can range between about 30 power decibels to about -90 power decibels, as measured at a single frequency.

Claims 5-6 (canceled).

7. (currently amended) The ultra-wideband communication ~~system of claim 9, wherein a wire employed in the community access television network device of claim 30, wherein~~ the wire is selected from a group consisting of: an optical fiber ribbon, a fiber optic cable, a single mode fiber optic cable, a multi-mode fiber optic cable, a twisted pair wire, an unshielded twisted pair wire, a plenum wire, a PVC wire, a coaxial cable, and an electrically conductive material.

Claims 8-10 (canceled).

11. (currently amended) The ~~method of claim 9,~~ ultra-wideband communication device of claim 31, wherein the ultra-wideband signal comprises an impulse radio signal.

12. (currently amended) The ~~method of claim 9,~~ ultra-wideband communication device of claim 31, wherein the ultra-wideband signal comprises a pulse of electromagnetic energy having a duration that can range between about 0.1 nanoseconds to about 100 nanoseconds.

13. (currently amended) The ~~method of claim 9,~~ ultra-wideband communication device of claim 31, wherein the ultra-wideband signal comprises a pulse of electromagnetic energy having a duration that can range between about 0.1 nanoseconds to about 100 nanoseconds and a power that can range between about 30 power decibels to about -90 power decibels, as measured at a single frequency.

14. (currently amended) The ~~method of claim 9~~, ultra-wideband communication device of claim 31, wherein the ultra-wideband signal is used to transmit data selected from a group consisting of: telephony data, high-speed data, digital video data, digital television data, Internet communication data and audio data.

Claims 15-29 (canceled).

30. (new) An ultra-wideband communication device structured to transmit and receive an ultra-wideband signal though wire and wireless media.

31. (new) An ultra-wideband communication device structured to receive an ultra-wideband signal though a wire medium and transmit an ultra-wideband signal through wire and wireless media.

32. (new) An ultra-wideband communication device structured to receive an ultra-wideband signal though a wireless medium and transmit an ultra-wideband signal through wire and wireless media.

33. (new) The ultra-wideband communication device of claim 32, wherein the ultra-wideband signal comprises a pulse of electromagnetic energy having a duration that can range between about 0.1 nanoseconds to about 100 nanoseconds.

34. (new) A method of ultra-wideband communication, the method comprising the steps of:

receiving an ultra-wideband signal from a wire; and

transmitting the ultra-wideband signal through a wire and wirelessly.

35. (new) The method of claim 34, wherein the ultra-wideband signal comprises a pulse of electromagnetic energy having a duration that can range between about 0.1 nanoseconds to about 100 nanoseconds.

36. (new) A method of ultra-wideband communication, the method comprising the steps of:

receiving an ultra-wideband signal wirelessly; and

transmitting the ultra-wideband signal through a wire and wirelessly.

37. (new) The method of claim 36, wherein the ultra-wideband signal comprises a pulse of electromagnetic energy having a duration that can range between about 0.1 nanoseconds to about 100 nanoseconds.